



GAU ~~2772~~

2671

Docket Number: C98-013

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Ivan A. Bachelder, Cyril C. Marrion Jr.

Serial Number: 09/127,676

Group Art Unit: ~~2772~~

Filed: 7/31/98

Examiner:

P. Nguyen

Title: METHOD FOR REFINING GEOMETRIC DESCRIPTION MODELS USING IMAGES

Certificate of Mailing

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service, first class mail, on the date shown below with sufficient postage in an envelope addressed to the: Commissioner of Patents and Trademarks, Washington, D.C. 20231

Date:

2/22/01

By:

Kristin Kobercy  
Kristin Kobercy

Hon. Commissioner of Patents and Trademarks  
Washington, D.C. 20231

Sir:

PETITION TO WITHDRAW HOLDING OF ABANDONMENT

BASED ON FAILURE TO RECEIVE OFFICE ACTION

The above captioned application has been deemed abandoned under 35 U.S.C. § 133 for failure to respond to an Office Action mailed April 27, 2000. The Office Action, however, was never received by the Applicant. Accordingly, the Applicant petitions to withdraw the holding of abandonment, and requests that the Office Action be re-mailed to the Applicant.

RECEIVED

FEB 28 2001

Technology Center 2600

REMARKS

The Office Action for the above-captioned application, mailed on April 27, 2000, was not received by the undersigned practitioner, or any persons by which such official communications would be received, including associate practitioners or paralegal staff.

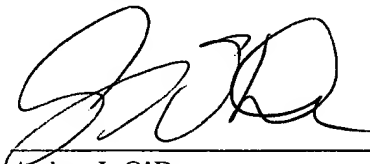
A search of the file jacket and docket records indicates that the Office communication was not received. A copy of the docket record where the non-received Office communication would have been entered, had it been received and docketed, is attached. If the Office communication was received in the approximate timeframe when mailed, a docketed response due date would have been entered showing a "Date Mailed" of April 27, 2000, with a "Due Date" of July 27, 2000 for the three-month response period. The docketed entries show the receipt of other Office

communications having mailing dates of April 26, 2000 and April 27, 2000 for other pending applications.

Additionally, a copy of the file jacket is enclosed showing a transmittal of Supplemental Information Disclosure Statement submitted before receipt of an Office Action on June 20, 2000, and a Status Inquiry on July 24, 2000.

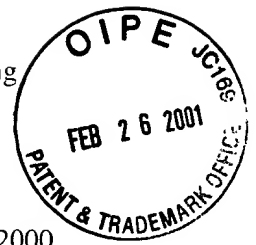
Accordingly, the Applicant respectfully requests that the Office withdraw the holding of abandonment, based on a failure to receive an office action, and re-mail the Office communication originally mailed April 27, 2000 for the above-captioned application.

Respectfully submitted,



Arthur J. O'Dea  
Registration Number 42,952  
Patent Attorney  
Cognex Corporation  
One Vision Drive  
Natick, MA 01760  
(508) 650-3108

Date: 2/22/2001



**RECEIVED**  
FEB 28 2001  
Technology Center 2600

02-22-01 14:36

From-LEGAL DEPART

6086503328

T-808 P.02/03 F-790



Docket Number. C98-013

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Ivan A. Bachelder, Cyril C. Marrion, Jr.

Serial Number: 09/127,676

Group Art Unit: 2772

Filed: 7/31/98

Examiner: P. Nguyen

Title: METHOD FOR REFINING GEOMETRIC DESCRIPTION MODELS USING IMAGES

## Certificate of Mailing

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service, first class mail, on the date shown below with sufficient postage in an envelope addressed to the Commissioner of Patents and Trademarks, Washington, D.C. 20231

Date: 2/22/01By: Kristin Koberly  
Kristin KoberlyAPPOINTMENT IN PATENT APPLICATIONASSOCIATE POWER OF ATTORNEY

Hon. Commissioner of Patents and Trademarks  
Washington, D.C. 20231

Sir:

The undersigned representative of applicant in the above-captioned patent application, hereby appoints as representative attorney **Arthur J. O'Dea**, Registration Number 42,952, with full power of association, to transact all business in the Patent and Trademark Office, and elsewhere, in connection therewith.

Respectfully submitted,

RECEIVED  
FEB 28 2001  
Technology Center 2600

Russ Weinzimmer  
Registration Number 36,717  
Chief Patent Counsel  
Cognex Corporation  
One Vision Drive  
Natick, MA 01760  
(508) 650-3154

Date: 2/22/01

# Office Action Report

Docket Number	Title	Atty	Date Mailed	Due Date	Date Completed	Completed (Yes/No)	Application Number
C97-035	Machine Vision Systems and Methods for Morphological Transformation of an Image with Zero or Other Uniform Offsets	DJP	1/7/2000	4/7/2000	5/18/2000	Yes	09/014,773
C96-011	Machine Vision Methods for Enhancing the Contrast Between an Object and its Background using Multiple On-Axis Images	DJP	1/20/2000	4/20/2000	5/22/2000	Yes	08/621,137
C97-011 CON	Constraint Satisfying Image Sub-sampler	R. Irving/ T. Miele	1/27/2000	4/27/2000	4/4/2000	Yes	09/287,637
C97-047	Methods and Apparatus for Generating a Projection of an Image	DJP	2/2/2000	5/2/2000	6/2/2000	Yes	09/055,543
C96-002 CON	System or method for Detecting Defect Within a Semi-Opaque Enclosure	T. Miele	2/2/2000	5/2/2000	5/2/2000	Yes	09/287,352

Docket Number	Title	Atty	Date Mailed	Due Date	Date Completed	Completed (Yes/No)	Application Number
C96-010 CON	Semiconductor Device Image Inspection with Contrast Enhancement	DJP	2/17/2000	5/17/2000	6/19/2000	Yes	09/184,407
C97-050	Fast High-Accuracy Multi-Dimensional Pattern Inspection	RW	2/17/2000	5/17/2000	8/17/2000	Yes	09/001,869
C98-019 CIP	Method and Apparatus for Inspecting Solder Paste Using Geometric Constraints	TC	2/22/2000	5/22/2000	5/22/2000	Yes	09/156,918
C97-007 CPA	Method for Locating Ball Grid Array Packages from Two-Dimensional Image Data	B. Michaelis	2/24/2000	5/24/2000	5/10/2000	Yes	08/947,760
C97-012	Machine Vision Method Using Search Models to Find Features in Three Dimensional Images	B. Michaelis	2/25/2000	5/25/2000	4/26/2000	Yes	09/000,583
C97-022	Machine Vision System for Object Feature Analysis and Validation Based on Multiple Object Images	T. Lober	3/1/2000	6/1/2000	6/30/2000	Yes	09/071,722

Docket Number	Title	Atty	Date Mailed	Due Date	Date Completed	Completed (Yes/No)	Application Number
---------------	-------	------	-------------	----------	----------------	--------------------	--------------------

C97-055	Determining a Depth	T. Miele	3/1/2000	6/1/2000	5/31/2000	Yes	09/014,771
---------	---------------------	----------	----------	----------	-----------	-----	------------

C97-009	A Pattern Similarity Metric for Image Search, Registration, and Comparison	RW	3/13/2000	6/13/2000	6/13/2000	Yes	09/108,279
---------	--	----	-----------	-----------	-----------	-----	------------

C98-018	A Method and Apparatus for Detecting Extended Defects in an Object	TC	3/15/2000	6/15/2000	6/15/2000	Yes	09/122,507
---------	--	----	-----------	-----------	-----------	-----	------------

C97-051	Method and Apparatus for Determining a Reference Point of an Object Profile within an Image	TC	3/15/2000	6/15/2000	6/13/2000	Yes	09/086,326
---------	---	----	-----------	-----------	-----------	-----	------------

C93-012	Improved Circle Location	RW	3/16/2000	6/16/2000	6/16/2000	Yes	08/212,173
---------	--------------------------	----	-----------	-----------	-----------	-----	------------

C97-054	Machine Vision Systems and Methods for Morphological Transformation of an Image with Non-Uniform Offsets	DJP	4/6/2000	7/6/2000	6/6/2000	Yes	09/014,670
---------	--	-----	----------	----------	----------	-----	------------

Docket Number	Title	Atty	Date Mailed	Due Date	Date Completed	Completed (Yes/No)	Application Number
C98-001	Image Processing Methods and Apparatus for Separable General Affine Transformation of an Image	DJP	4/11/2000	7/11/2000	6/12/2000	Yes	09/027,432
C99-028	System and Method for Inspecting an Object Using Structured Illumination	B. Loginov	4/13/2000	7/13/2000	6/8/2000	Yes	09/418,643
C95-001 CPA2	Apparatus and Method for Determining the Location and Orientation of a Reference Feature in an Image	RW	4/25/2000	7/25/2000	7/25/2000	Yes	08/404,388
C97-052C	A Method for Automatic Visual Identification of a Reference Site in an Image	TC	4/26/2000	7/26/2000	8/28/2000	Yes	09/129,152
C97-014 CON	Analysis of an Image of a Pattern of Discrete Objects	B. Michaelis	4/26/2000	7/26/2000	7/26/2000	Yes	09/461,412
C98-009	Automated Inspection of Objects Undergoing General Affine Transformation	B. Michaelis	4/26/2000	7/26/2000	7/26/2000	Yes	09/141,932

Docket Number	Title	Atty	Date Mailed	Due Date	Date Completed	Completed (Yes/No)	Application Number
---------------	-------	------	-------------	----------	----------------	--------------------	--------------------

C98-025	Gauging Using Sub-model Poses	RW	4/27/2000	7/27/2000	7/27/2000	Yes	09/140,124
---------	-------------------------------	----	-----------	-----------	-----------	-----	------------

C97-011 CON CPA	Image Processing System and Method Using Subsampling with Constraints such as Time and Uncertainty Constraints	R. Irving	5/4/2000	8/4/2000	6/16/2000	Yes	09/287,637
-----------------	--	-----------	----------	----------	-----------	-----	------------

C97-016 CON	Analyzing an Acquired Arrangement of Object Locations	B. Michaelis	5/23/2000	8/23/2000	8/23/2000	Yes	09/461,420
-------------	---	--------------	-----------	-----------	-----------	-----	------------

C98-019 CIP	Method and Apparatus for Inspecting Solder Paste Using Geometric Constraints	TC	6/28/2000	9/28/2000	9/28/2000	Yes	09/156,918
-------------	--	----	-----------	-----------	-----------	-----	------------

C98-051	Machine Vision Methods and Systems for Boundary Feature Comparison of Patterns and Images	DJP	7/13/2000	10/13/2000	9/6/2000	Yes	09/216,048
---------	---	-----	-----------	------------	----------	-----	------------

C98-022	Locating an Image of an Object having a Concentric Profile	RW	7/14/2000	10/14/2000	10/16/2000	Yes	09/216,071
---------	--	----	-----------	------------	------------	-----	------------



Docket Number	Title	Atty	Date Mailed	Due Date	Date Completed	Completed (Yes/No)	Application Number
---------------	-------	------	-------------	----------	----------------	--------------------	--------------------

C97-055 DIV	Determining a Depth	T. Miele	7/18/2000	10/18/2000	10/18/2000	Yes	09/464,745
-------------	---------------------	----------	-----------	------------	------------	-----	------------

C98-048	Machine Vision Methods and Systems for Boundary Point-Based Comparison of Patterns and Images	D. Powsner	7/19/2000	10/19/2000	9/25/2000	Yes	09/215,943
---------	---	------------	-----------	------------	-----------	-----	------------

C96-013 CPA2	Apparatus and Method for Detection and Sub-pixel Location of Edges in a Digital Image	RW	7/26/2000	10/26/2000	11/27/2000	Yes	08/727,721
--------------	---	----	-----------	------------	------------	-----	------------

C97-055	Determining a Depth	T. Miele	8/10/2000	11/10/2000	11/1/2000	Yes	09/014,771
---------	---------------------	----------	-----------	------------	-----------	-----	------------

C98-020	Object Image Search Using Sub-Models	RW	8/21/2000	11/21/2000	11/21/2000	Yes	09/054,968
---------	--------------------------------------	----	-----------	------------	------------	-----	------------

C98-021	Improved Object Image Search Using Validated Sub-Model Poses	RW	8/23/2000	11/23/2000	11/22/2000	Yes	09/212,844
---------	--	----	-----------	------------	------------	-----	------------

Docket Number	Title	Atty	Date Mailed	Due Date	Date Completed	Completed (Yes/No)	Application Number
---------------	-------	------	-------------	----------	----------------	--------------------	--------------------

C99-034	Video Safety Curtain	B. Michaelis	9/11/2000	12/11/2000	12/11/2000	Yes	09/448,962
---------	----------------------	--------------	-----------	------------	------------	-----	------------

C96-010 CON	Semiconductor Device Image Inspection with Contrast Enhancement	DJP	9/26/2000	12/26/2000	1/26/2001	Yes	09/184,407
-------------	---	-----	-----------	------------	-----------	-----	------------

C98-051	Machine Vision Methods and Systems for Boundary Feature Comparison of Patterns and Images	DJP	9/28/2000	12/28/2000	1/29/2001	Yes	09/216,048
---------	---	-----	-----------	------------	-----------	-----	------------

C98-032	A Method and Apparatus to Transform a Region within a Digital Image Using a Deformable Window	TC	10/2/2000	1/2/2001	2/2/2001	Yes	09/135,112
---------	---	----	-----------	----------	----------	-----	------------

C97-017 DIV	Method and Apparatus Using Image Subtraction and Dynamic Thresholding	B. Michaelis	10/2/2000	1/2/2001	2/2/2001	Yes	09/478,840
-------------	---	--------------	-----------	----------	----------	-----	------------

C99-010	Method and Apparatus for Providing Uniform Diffuse Illumination to a Surface	B. Loginov	10/3/2000	1/3/2001	12/12/2000	Yes	09/387,159
---------	--	------------	-----------	----------	------------	-----	------------

Docket Number	Title	Atty	Date Mailed	Due Date	Date Completed	Completed (Yes/No)	Application Number
---------------	-------	------	-------------	----------	----------------	--------------------	--------------------

C98-009	Automated Inspection of Objects Undergoing General Affine Transformation	B. Michaelis	10/12/2000	1/12/2001	12/12/2000	Yes	09/141,932
---------	--	--------------	------------	-----------	------------	-----	------------

C97-047	Methods and Apparatus for Generating a Projection of an Image	DJP	10/13/2000	1/13/2001	2/7/2001	Yes	09/055,543
---------	---	-----	------------	-----------	----------	-----	------------

C97-014 CON	Analysis of an Image of a Pattern of Discrete Objects	B. Michaelis	10/13/2000	1/13/2001	1/16/2001	Yes	09/461,412
-------------	---	--------------	------------	-----------	-----------	-----	------------

C96-022 CON	Nonfeedback-based Machine Vision Methods for Determining a Calibration Relationship Between a Camera and a Moveable Object	DJP	10/25/2000	1/25/2001	1/25/2001	Yes	09/223,855
-------------	--	-----	------------	-----------	-----------	-----	------------

C98-025	Gauging Using Sub-Model Poses	RW	11/2/2000	2/2/2001	2/2/2001	Yes	09/140,124
---------	-------------------------------	----	-----------	----------	----------	-----	------------

C97-016 CON	Analyzing an Acquired Arrangement of Object Locations	Art	11/22/2000	2/22/2001		No	09/461,420
-------------	---	-----	------------	-----------	--	----	------------

Docket Number	Title	Atty	Date Mailed	Due Date	Date Completed	Completed (Yes/No)	Application Number
---------------	-------	------	-------------	----------	----------------	--------------------	--------------------

C98-048	Machine Vision Methods and Systems for Boundary Point-Based Comparison of Patterns and Images	Art	12/21/2000	3/21/2001		No	09/215,943
---------	---	-----	------------	-----------	--	----	------------

C97-054	Machine Vision Systems and Methods for Morphological Transformation of an Image with Non-Uniform Offsets	DJP	1/3/2001	4/3/2001		No	09/014,670
---------	--	-----	----------	----------	--	----	------------

C99-017	Processing Continuous Data Streams in Electronic Spreadsheets	RW	1/23/2001	4/23/2001		No	09/370,808
---------	---	----	-----------	-----------	--	----	------------

C99-034	Video Safety Curtain	B. Michaelis	2/13/2001	5/13/2001		No	09/448,962
---------	----------------------	--------------	-----------	-----------	--	----	------------

